**Place Postage Here.**
Or for additional security enclose in a envelope.

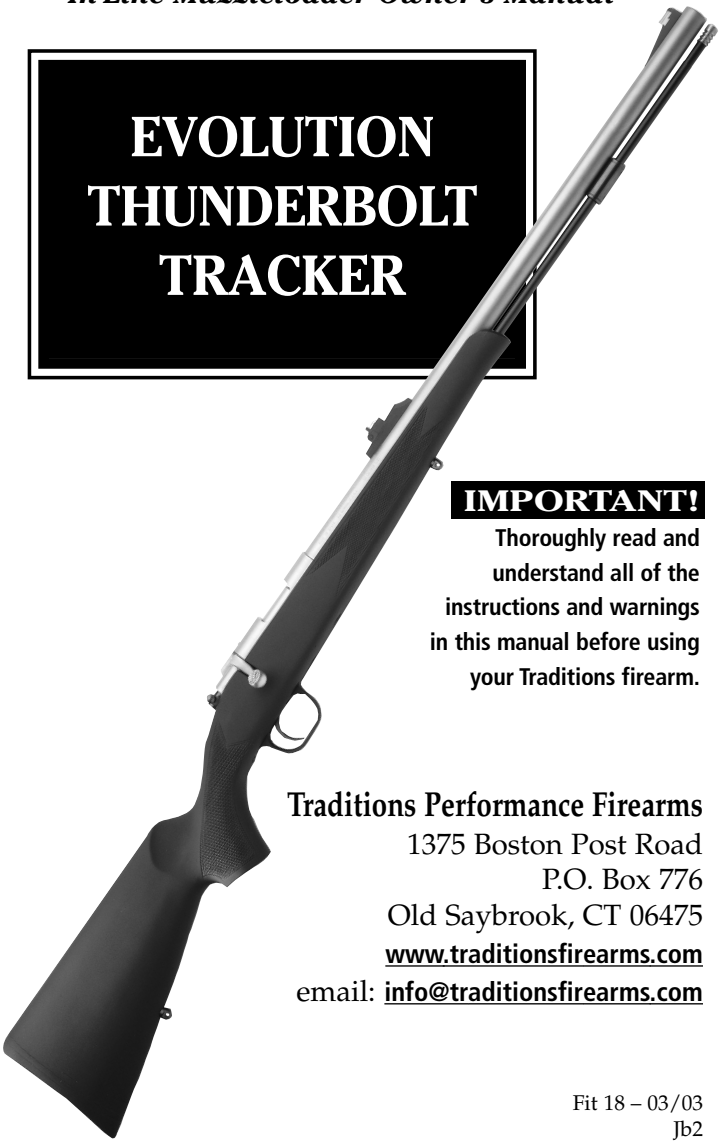
TRADITIONS™
PERFORMANCE FIREARMS

P.O. Box 776
Old Saybrook, CT 06475-0776

# TRADITIONS™
## PERFORMANCE FIREARMS

***In-Line Muzzleloader Owner's Manual***

# EVOLUTION THUNDERBOLT TRACKER



**IMPORTANT!**

**Thoroughly read and understand all of the instructions and warnings in this manual before using your Traditions firearm.**


**Traditions Performance Firearms**
1375 Boston Post Road
P.O. Box 776
Old Saybrook, CT 06475
**www.traditionsfirearms.com**
email: **info@traditionsfirearms.com**



Fit 18 – 03/03
Jb2

## TRADITIONS' WARRANTY PROTECTION INCLUDED WITH YOUR NEW GUN

Quality, pride and old world craftsmanship has gone into your new Traditions muzzleloader. We work hard to provide the best value and performance possible, we back it up with a limited lifetime mechanical warranty. Should you ever experience mechanical difficulty with your new Traditions firearm, be assured that we are staffed and equipped to correct it quickly. Your satisfaction with your firearm is very important to us.

## PLEASE HELP US SERVE YOU BETTER

In the unlikely event you need warranty service on your new firearm, we need your help to get the work done right and without delay. It's as easy as dropping us a note or picking up the telephone.

Traditions conveniently embosses the caliber, twist configuration, and model name on each barrel. Take note of this information and be prepared to state it when contacting the Traditions Customer Service Department with your questions.

**Contact Traditions at 1-800-526-9556, tell us what problem you are experiencing and we'll get busy to remedy your situation.**

Help is just a phone call away should you ever experience a problem. Simply follow these four simple steps and we'll get your firearm back in perfect working order in the shortest possible time.

1. **Do not return your firearm to the dealer. You can save time by following the steps outlined below.**
2. Do call us and describe the problem. Chances are we can either guide you to a solution right over the phone or when possible send you the parts you need to correct the problem.
3. Should your gun need factory service, we will give you instructions as to where to ship it.
4. We will inspect your firearm and make necessary repairs that are covered under warranty.

Often we can help you by phone, Call before you return your Traditions firearm for service. Good Shooting!

**1-800-526-9556**

**Important:** All firearms must have a factory issued return authorization number (RA#) before returning to traditions for warranty service.

## LIMITED LIFETIME MECHANICAL WARRANTY

Traditions will warrant this muzzleloading firearm (or parts in a kit to be built) to be free of mechanical defects in materials or craftmanship for the life of the firearm, while in the possession of the original owner except wooden stocks. Traditions will repair or replace, at its own option, product or parts which are returned at owner's expense to the Traditions Customer Service Department. A full explanation of the specific problem must accompany the returned item. Call 1-800-526-9556 to obtain a factory issued return authorization number.

Firearms packaged and shipped improperly are not covered under warranty if damage occurs.

This warranty shall remain in force unless any of the following are determined by the Traditions Customer Service Department:

1. Use of any propellant other than black powder, Pyrodex or Triple 7.
2. Use of any powder charges in excess of those recommended in this booklet.
3. Use of any plastic patching material with round balls.
4. Modification of internal parts as they were shipped from the factory.
5. A lack of proper maintenance and thorough cleaning is evident such as rust.
6. Wooden stocks and ramrods are warrantied to the extent that the defect is a result of the manufacturer and not as a consequence of normal wear and tear.

Shipping Address:
Traditions Performance Firearms
1375 Boston Post Rd. • P.O. Box 776
Old Saybrook, CT 06475-0776
Tel. 800-526-9556
Fax. 860-388-4657
Website: www.traditionsfirearms.com
E-mail: info@traditionsfirearms.com
Business hours: M-Th. 7:30-4:30 EST
Fri.-7:30-12:30 EST

If you are unsure how to package your firearm for return, ask your service representative when obtaining your RA#

# Table Of Contents

YOUR NEW TRADITIONS MUZZLELOADER . . . . . 1

TODAY'S MUZZLELOADING SPORT . . . . . 2

MUZZLELOADING 'MUSTS'
FOR MUZZLELOADING SUCCESS . . . . . 3

BEFORE YOU USE YOUR MUZZLELOADER . . . . . 5

THUMB SAFETY . . . . . 5

DISASSEMBLY FOR IN-LINE MUZZLELOADERS. . . . . 7

DISASSEMBLY FOR BOLT-ACTION MUZZLELOADERS . . . . . 8

IGNITION (includes nipples and breech plugs) . . . . . 10

ADJUSTABLE TRIGGER. . . . . 12

LOADING . . . . . 12

RECOMMENDED PROPELLANTS. . . . . 13

LOADING THE POWDER. . . . . 14

LOADING THE PROJECTILE. . . . . 16

CAPPING YOUR MUZZLELOADER . . . . . 18

IF THE GUN FAILS TO FIRE. . . . . 19

REMOVING THE PROJECTILE AND THE CHARGE . . . . . 20

SIGHTING IN . . . . . 21

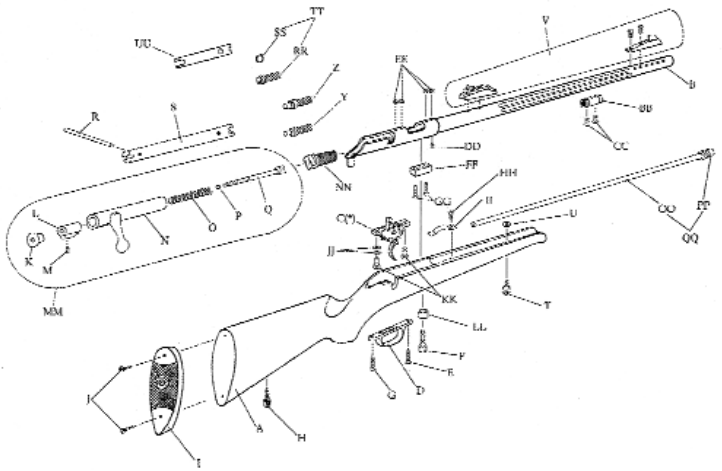
RECOMMENDED LOADS . . . . . 22

CLEANING . . . . . 24

HELPFUL MUZZLELOADING ACCESSORIES. . . . . 26

PREFERRED CUSTOMER WARRANTY . . . . . 28

# Evolution™ Premier Rifle

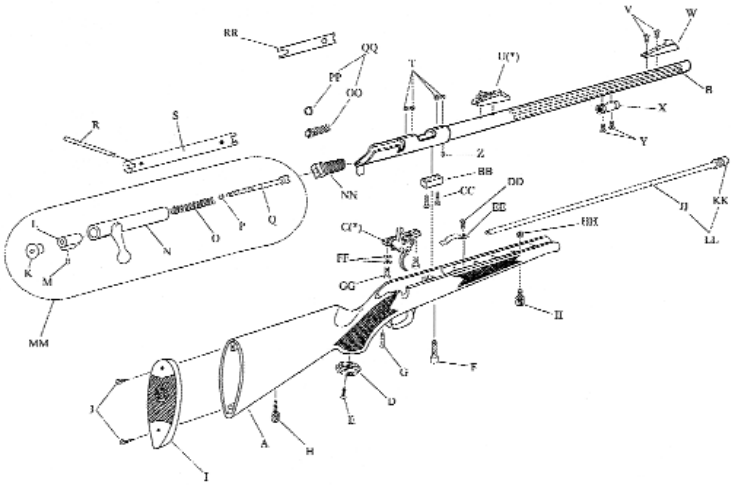



## DESCRIPTION

| | Description |
|---|---|
| A | Stock |
| B | Barrel Assembly (Length 26") .50 cal. Perc. (twist 1-28") |
| C | Trigger Assembly (Adjustable) |
| D | Trigger Guard (Blackened) |
| E | Trigger Guard Screw |
| F | Action Mounting Screw (Allen Head) |
| G | Action Mounting Screw |
| H | Sling Swivel Stud-Rear |
| I | Buttpad |
| J | Buttpad Mounting Screw (2) |
| K | Cap |
| L | Bolt Head |
| M | Locking Screw |
| N | Bolt |
| O | Mainspring |
| P | Red Ring |
| Q | Striker |
| R | Wrench Handle |
| S | Wrench |
| T | Sling Swivel Stud-Front |
| U | Sling Swivel Stud-Front Nut |
| V | Right Sight Assembly |

| | Description |
|---|---|
| Y | Percussion Nipple |
| Z | Musket Cap Nipple |
| BB | Ramrod Thimble |
| CC | Ramrod Thimble Screw (2) |
| DD | Barrel Locking Screw |
| EE | Plug Screw |
| FF | Bedding Block |
| GG | Bedding Block Screw (Allen Head) (2) |
| HH | Ramrod Retaining Spring Screw |
| II | Ramrod Retaining Spring |
| JJ | Lock Washers (2) |
| KK | Trigger Assembly Mount Screw (2) |
| LL | Stock Bushing |
| MM | Bolt Assembly |
| NN | Breech Plug |
| OO | Ramrod (Aluminum) |
| PP | Ramrod Tip Cal .50 |
| QQ | Ramrod Assembly |
| RR | 209 Cap Nipple |
| SS | 209 Cap Nipple Spring |
| TT | 209 Cap Nipple Assembly |
| UU | Decapping Tool |

# Evolution™ LD Rifle

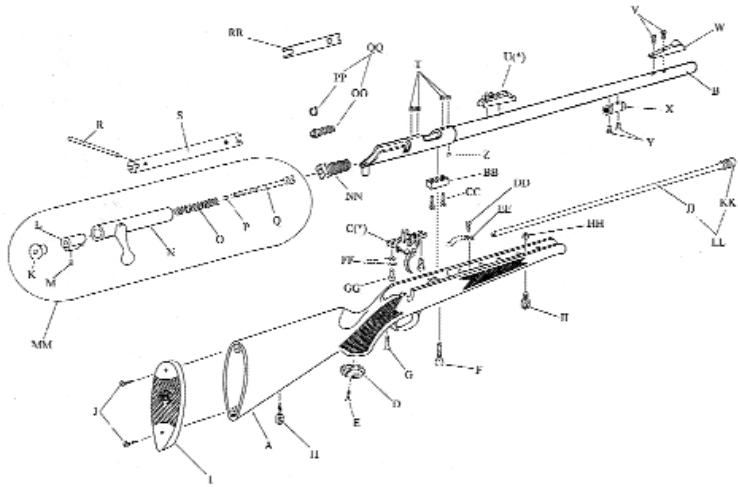



## DESCRIPTION

| | Description |
|---|---|
| A | Stock |
| B | Barrel Assembly (Length 26") .50 cal. Perc. (twist 1-28") |
| C | Trigger Assembly (Adjustable) |
| D | Pistol Grip Cap |
| E | Pistol Grip Cap Screw |
| F | Action Mounting Screw (Allen Head) |
| G | Action Mounting Screw |
| H | Sling Swivel Stud-Rear |
| I | Buttpad |
| J | Buttpad Mounting Screw (2) |
| K | Cap |
| L | Bolt Head |
| M | Locking Screw |
| N | Bolt |
| O | Mainspring |
| P | Red Ring |
| Q | Striker |
| R | Wrench Handle |
| S | Wrench |
| T | Plug Screw (4) |
| U | Fiber Optic Rear Sight |

| | Description |
|---|---|
| V | Front Sight Mounting Screw (2) |
| W | Fiber Optic Front Sight |
| X | Ramrod Thimble |
| Y | Ramrod Thimble Screw (2) |
| Z | Barrel Locking Screw |
| BB | Bedding Block |
| CC | Bedding Block Screw (Allen Head) (2) |
| DD | Ramrod Retaining Spring Screw |
| EE | Ramrod Retaining Spring |
| FF | Lock Washers (2) |
| GG | Trigger Assembly Mount Screw (2) |
| HH | Sling Swivel Stud-Front Nut |
| II | Sling Swivel Stud-Front |
| JJ | Ramrod (Aluminum) |
| KK | Ramrod Tip Cal .50 |
| LL | Ramrod Assembly |
| MM | Bolt Assembly |
| NN | Breech Plug |
| OO | 209 Cap Nipple |
| PP | 209 Cap Nipple Spring |
| QQ | 209 Cap Nipple Assembly |
| RR | Decapping Tool |

# Evolution™ Rifle

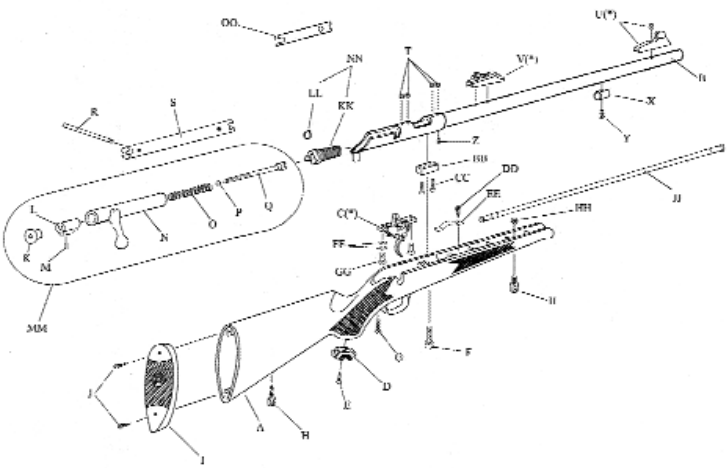



## DESCRIPTION

| | Description |
|---|---|
| A | Stock |
| B | Barrel Assembly (Length 24") .50 cal. Perc. (twist 1-28") |
| C | Trigger Assembly (Adjustable) |
| D | Pistol Grip Cap |
| E | Pistol Grip Cap Screw |
| F | Action Mounting Screw (Allen Head) |
| G | Action Mounting Screw |
| H | Sling Swivel Stud-Rear |
| I | Buttpad |
| J | Buttpad Mounting Screw (2) |
| K | Cap |
| L | Bolt Head |
| M | Locking Screw |
| N | Bolt |
| O | Mainspring |
| P | Red Ring |
| Q | Striker |
| R | Wrench Handle |
| S | Wrench |
| T | Plug Screw (4) |
| U | Fiber Optic Rear Sight |

| | Description |
|---|---|
| V | Front Sight Mounting Screw(2) |
| W | Fiber Optic Front Sight |
| X | Ramrod Thimble |
| Y | Ramrod Thimble Screw (2) |
| Z | Barrel Locking Screw |
| BB | Bedding Block |
| CC | Bedding Block Screw (Allen head)(2) |
| DD | Ramrod Retaining Spring Screw |
| EE | Ramrod Retaining Spring |
| FF | Lock Washers (2) |
| GG | Trigger Assembly Mount Screw (2) |
| HH | Sling Swivel Stud-Front Nut |
| II | Sling Swivel Stud-Front |
| JJ | Ramrod (Aluminum) |
| KK | Ramrod Tip Cal. |
| LL | Ramrod Assembly |
| MM | Bolt Assembly |
| NN | Breech Plug |
| OO | 209 Cap Nipple |
| PP | 209 Cap Nipple Spring |
| QQ | 209 Cap Nipple Assembly |
| RR | Decapping Tool |

# Thunderbolt™ Rifle




## DESCRIPTION

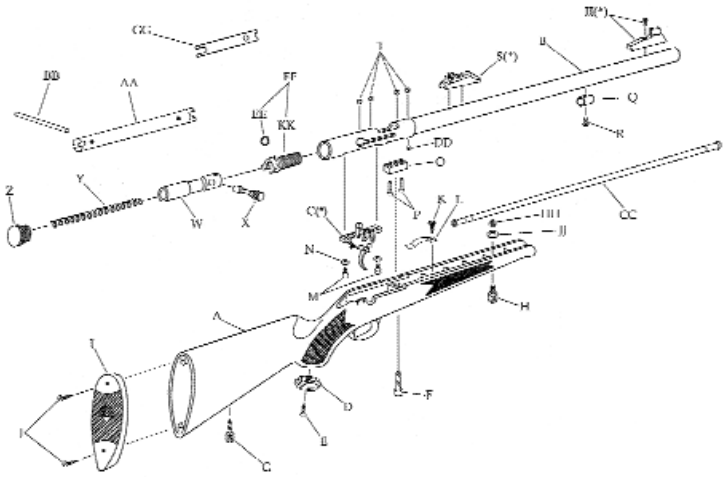
**Description**

- A Stock (Finished)
- B Barrel Assembly (Length 24”) .50 cal. Perc. (twist 1-28”)
- C Trigger Assembly (Adjustable)
- D Pistol Grip Cap
- E Pistol Grip Cap Screw
- F Action Mounting Screw (Allen Head)
- G Action Mounting Screw
- H Sling Swivel Stud-Rear
- I Buttpad
- J Buttpad Mounting Screw (2)
- K Cap
- L Bolt Head
- M Locking Screw
- N Bolt
- O Mainspring
- P Red Ring
- Q Striker
- S Wrench

**Description**

- T Plug Screw (4)
- U New Luminous Front Sight
- V New Luminous Rear Sight
- X Ramrod Thimble
- Y Ramrod Thimble Screw
- Z Barrel Locking Screw
- BB Bedding Block
- CC Bedding Block Screw (Allen head) (2)
- DD Ramrod Retaining Spring Screw
- EE Ramrod Retaining Spring
- FF Lock Washers (2)
- GG Trigger Assembly Mount Screw (2)
- HH Sling Swivel Stud-Front Nut
- II Sling Swivel Stud-Front
- JJ Ramrod Assembly
- KK 209 Breech Plug-Nipple
- LL 209 Cap Breech Plug-Nipple
- MM Bolt Assembly
- NN 209 Breech Plug-Nipple Assembly
- OO Decapping Tool

# Tracker 209 In-Line Rifle



## DESCRIPTION

| | Description |
|---|---|
| A | Stock |
| B | Barrel Assembly (Length 24") .50 cal. Perc. (twist 1-28") |
| C | Trigger Assembly |
| D | Pistol Grip Cap |
| E | Pistol Grip Cap Screw |
| F | Action Mounting Screw (Allen Head) |
| G | Sling Swivel Stud-Rear |
| H | Sling Swivel Stud-Front |
| I | Buttpad |
| J | Buttpad Mounting Screw (2) |
| K | Ramrod Retaining Spring Screw |
| L | Ramrod Retaining Spring |
| M | Trigger Assembly Mount Screw (2) |
| N | Lock Washers (2) |
| O | Bedding Block |
| P | Bedding Block Screw (Allen head) (2) |
| Q | Ramrod Thimble |
| R | Ramrod Thimble Screw |
| S | New Luminous Rear Sight |
| T | Plug Screw (4) |
| W | Bolt |
| X | Bolt Handle |
| Y | Mainspring |
| Z | Receiver Cap (Blued) |
| AA | Wrench |
| BB | Wrench Handle |
| CC | Ramrod Assembly |
| DD | Barrel Locking Screw |
| EE | 209 Cap Nipple Spring |
| FF | 209 Breech Plug-Nipple Assembly |
| GG | Decapping Tool |
| HH | Sling Swivel Stud-Front Nut |
| II | New Luminous Front Sight |
| JJ | Sling Swivel Stud-Front Washer |
| KK | 209 Breech Plug-Nipple |

TRADITIONS™
PERFORMANCE FIREARMS

# YOUR MUZZLELOADING RIFLE

Congratulations on your purchase of a Traditions muzzleloader. You have selected a muzzleloading firearm designed and engineered to give today's shooters the highest performance and optimum accuracy. When given the respect and care that any firearm demands, you can expect many years of reliable service and enjoyable hunting from your new Traditions muzzleloader.

A person using any firearm has elected to take on an enormous responsibility. This manual contains instructions, cautions and dangers for the safe enjoyable use of your Traditions muzzleloader. Shooting a firearm is a serious endeavor. These instructions and precautions should always be followed during each shooting session.

Safe firearm handling, loading and shooting are your responsibility and requires that you understand and respect the design and function of your firearm. All firearms can be very dangerous if misused, handled improperly or not properly maintained.

Like all firearms, muzzleloaders can be dangerous. Your purchase of this firearm implies that you accept all the responsibilities associated with its proper handling, use and care. Also, if in the hands of another, realize that you have the duty to insure that that person handles your firearm in the correct and proper manner.

Tradition's markets a "How to" Muzzleloading video called *The Basics of Muzzleloading*. This video is very helpful in understanding the basic steps and procedures involved in loading, shooting, cleaning and maintaining your muzzleloader. This video can be purchased from your local sporting goods dealer or direct from Traditions Firearms by calling 1-800-526-9556.

**CAUTION: If you sell, trade or give this rifle to another person, be sure to give the new owner a copy of this manual. Copies of this manual are available free of charge from Traditions Performance Firearms.**

# THE SPORT OF MUZZLELOADING

More and more sportsmen have discovered the challenges and enjoyment of muzzleloading in recent years. For both hunting and target shooting, muzzleloading guns have helped a modern generation recapture and enjoy an important aspect of our nation's sporting past.

Traditions In-Line Muzzleloaders are firearms which represent the latest developments in this unique part of the shooting sports. They are manufactured to modern standards for safe and enjoyable shooting.

This booklet is intended as a basic guide for the proper maintenance, loading and shooting of Traditions muzzleloaders, and to offer important rules and precautions for safe handling and shooting of this type of firearm. In addition to this booklet, it is recommended that the novice obtain further information and instruction before firing a muzzleloader. Sources for this help include:

1. National Muzzle Loading Rifle Association
   P.O. Box 67, Friendship, Indiana, 47021, 1-800-745-1493 or visit them on the web @ HYPERLINK http://www.nmlra.org or www.nmlra.org

   The following are available from the
   National Muzzle Loading Association:
   *"The Muzzleloading Rifle Handbook"*
   *"The Muzzleloading Pistol Handbook"*

2. National Rifle Association has over 41,500 certified instructors in the United States, and offers courses on safe and correct operation of muzzleloading rifles. To find a local instructor, contact NRA's Training Division at 1-703-267-1430, or visit them online at **www.nra.org**.
3. Your town clerk, local sporting good dealer, state DEP or conservation department can provide information on hunter safety courses offered in your area. Many such courses include muzzleloader training and are excellent for the beginner shooter.
4. Contact your local muzzleloader or hunting club. Club members should be pleased to help introduce you to enjoyable shooting.

# MUZZLELOADING 'MUSTS' FOR MUZZLELOADING SUCCESS

1. Read completely, fully understand and be willing to follow all instructions and warranty limitations outlined in this booklet before loading or attempting to shoot your new Traditions muzzleloader.

2. Always treat any firearm as if it is loaded.

3. Always wear proper eye and ear protection when loading or firing any firearm.

4. Don't shoot until you are absolutely sure of your target and what is beyond it. Do not point your firearm at anything you do not intend to shoot. Be sure that all bystanders are safely positioned behind you and that they are aware that you are about to shoot. Be mindful that this firearm has a range in excess of a half a mile.

5. Use only the proper grade of black powder, Pyrodex® powder, Pyrodex Pellets® or Triple 7 powder in properly measured amounts. Be sure to reference the chart in this booklet for recommended loads. Reduce charges of Triple 7 by 15%, whether measuring by weight or volume.

6. Never use any amount of smokeless gun powder in your muzzleloader. Although also black in color, smokeless powder is a very different chemical composition and it will produce dangerous pressures resulting in serious injury to yourself, bystanders and it will damage your firearm.

7. Never smoke or permit others to smoke in the presence of black powder or Pyrodex®. Take care to guard against all potential ignition sources.

8. Never take drugs and/or drink alcoholic beverages before and during shooting.

9. Be certain that the powder, patches and projectiles are properly sized and measured and are loaded in their proper sequence and that the projectile is firmly seated on top of the propellant.

10. Use only cotton or linen shooting patches when loading round lead balls. Do not use any type of plastic patches.

11. Never load powder into a gun directly from a can, powder horn or flask. Always use a separate calibrated powder measuring device. A remaining spark or ember in the barrel may cause an ignition of the powder and cause harm to you, bystanders and the firearm.

13. No projectiles other than those specifically recommended in this manual should be used in your muzzleloader.

14. Always be mindful of where the safety lever is set and routinely verify its setting. Never solely rely on any rifle's safety. It is prudent to always treat every gun as if it were loaded and ready to fire. A firearm's safety is a mechanical device which can fail.

15. Always disable your muzzleloader by carefully removing the percussion cap or primer and unloading the barrel when immediate shooting is not planned.

16. Never install a percussion cap or primer on the nipple before the gun is loaded. When loaded, a bump or unintentional pressure could result in the discharge of the firearm resulting in a serious accident.

17. Never leave a loaded firearm unattended.

18. Never climb, jump or move abruptly while carrying any loaded firearm.

19. Never transport a loaded firearm nor shoot one from within a vehicle.

20. Always store the powder, gun and percussion caps or primers in separate locked places. Always keep all firearms and ammunition components secured and separate away from children. Never store a loaded gun.

21. In the event of a misfire, assume the gun could fire at any moment. Keep gun pointed down range with the bolt closed. Wait at least one minute before recapping, repriming, or removing the load from the barrel.

22. Never load a muzzleloading firearm indoors. Only load your firearm in a location where it is safe to shoot.

23. Be certain that anyone firing this muzzleloader understands and is willing to follow the instructions and precautions in this manual and the fundamentals of safe firearm handling.

24. Always make certain that the safety is fully set in the most rearward "Safe" (S) position when installing percussion caps or primers.

25. Never shoot at a hard, flat surface or the surface of water.

26. Make sure you have a safe and secure backstop of proper thickness and density necessary to capture the projectiles.

Take time now to acquaint yourself with your new Traditions Muzzleloader. If you have any questions regarding your muzzleloader after reviewing this information, please contact theTraditions Customer Service Department for assistance. 1-800-526-9556

## MAKE SURE THAT THE MUZZLELOADER IS UNLOADED BEFORE PROCEEDING.

To check if the muzzleloader is unloaded, remove the ramrod and place it down the barrel. The ramrod should be flush with the muzzle. If it is not, you will need to disassemble the muzzleloader and remove the obstruction before proceeding. Refer to the disassemble section.

## BEFORE YOU USE YOUR MUZZLELOADER, CLEAN & LUBRICATE IT!

These are brief instructions on what to do before you use your muzzleloader for the first time. Please review the Disassembly instructions inside for a complete set of instructions. When you first take the muzzleloader new, out of the box there will be some manufacturing oils and grease for shipping purposes. These residues need to be removed so that the muzzleloader will function properly.

1. Remove the bolt or plunger (depending on the model you have), nipple & breech plug from your muzzleloader.
2. Remove the barrel action from the stock and clean the barrel with hot, soapy water. This will remove any manufacturing residue that may be on the inside or outside of the barrel.
3. Dry all of the parts completely.
4. Apply a light coat of Tradition's Wonderlube 1000 Plus lubricant to a dry patch (or use Tradition's pre-lubes patches) and run up & down the bore before loading. This will allow for easier loading and cleaning throughout your shooting sessions.
5. Lubricate the threads of the breech plug and nipple with Tradition's Wonderlube 1000 Plus or Tradition's Breech plug grease.

## THUMB SAFETY

Your Traditions ThunderBolt or Evolution rifle is equipped with a trigger blocking thumb safety. (Standard Buckhunter Models do not come with this feature.) When this safety is set on "Safe"(S) or pulled to the rear, it will restrict movement of the trigger. When the safety is set on "Fire" (F) or pushed to the front, the hammer will be released and will fire when the trigger is pulled.

**CAUTION: With the safety set in the "Fire" (F) position, the gun is now ready to fire. Never rely totally on your rifle's mechanical "safety" device. The word "Safety" describes a**

**gun's trigger block mechanism. This mechanical device is designed to place your gun in a safer status. No guarantee can be made that the gun absolutely will not fire even if the safety is set on the "Safe" (S) position. Like any mechanical device, a "Safety" can sometimes fail. It can be jarred or inadvertently manipulated into an unsafe condition. Never test the safety while your rifle is loaded or at any time while it is pointed in an unsafe position.**

## A Note About Maintenance Procedures:

Proper maintenance and cleaning of your new muzzleloader will require you to remove the barreled action from the stock. You must clean the muzzleloader each time it is used. Please see the Disassembly and Cleaning sections for more information. Take time before such cleaning to study the Disassembly/Assembly procedures and the accompanying photographs to thoroughly acquaint yourself with your rifle's subassemblies.

### Removal of Barrel from the Stock
### *(All model In-Line Muzzleloaders)*

1. Make sure the muzzleloader is UNLOADED & UNCAPPED.
2. Remove the ramrod. Using a 5mm hex wrench, loosen and remove the hex bolt in front of trigger guard.
3. *ThunderBolt and Evolution rifles*
   a. Loosen and remove the flat head screw behind the trigger guard.

**Tracker 209 model shown here.**

*Buckhunter models*

c. Loosen forearm swivel stud by gently turning in a counter-clockwise direction.

**Note:** The swivel stud on the forend of the Buckhunter Series muzzleloaders needs to be replaced or re-tightened. Also, if the forearm swivel stud is over-tightened, the ramrod may not slide back into the stock. You will need to loosen it up a little.

4. Lift barrel up and away from the stock. The trigger assembly should come out with the barrel. See fig. 1

## DISASSEMBLY FOR IN-LINE MUZZLELOADERS:

### *(Tracker 209 , Buckhunter's & other variations)*

**Before proceeding with disassembly and maintenance of your rifle, make certain the gun is unloaded and that the cap, or primer has been removed from the nipple.**

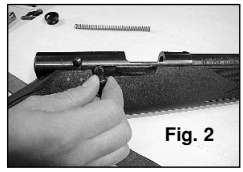


Fig. 2

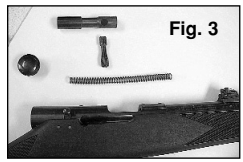


Fig. 3

1. Remove ramrod and make sure the muzzleloader is unloaded.
2. With safety in "fire" or "off" position, hold trigger in and push bolt handle and bolt to the forward position. Place bolt in full forward position by holding moderate pressure on the bolt handle, then pulling the trigger and gently sliding the bolt to its full forward position. A new muzzleloader will come with the bolt already in the forward position.
3. Unscrew the knurled cap at back end of receiver, maintaining a constant pressure on the cap to prevent an accidental release of the bolt spring.

**CAUTION: The bolt is under compression even with bolt in full forward position and can cause serious injury if released unexpectedly. Exercise caution whenever removing or replacing knurled cap and spring.**

4. Remove bolt spring.
5. Squeeze trigger and slide bolt handle back to the rearmost position in the receiver. see fig. 2
6. Remove bolt handle by pulling straight out from side of the receiver. You may have to jiggle the handle a bit while pulling.
7. Squeeze the trigger and push the bolt out through the rear of receiver. By pulling trigger, it allows the sear to drop down and allow the bolt to be removed. You should have 4 parts on the table. See fig.3. (Buckhunter models will have a spring follower.)

# DISASSEMBLY FOR BOLT ACTION MUZZLELOADERS:

## *(ThunderBolt and Evolution Rifles)*

### Removal of Bolt from the Receiver

**Before proceeding with disassembly and maintenance of your rifle, make certain the gun is unloaded and that the percussion cap or primer has been removed from the nipple.**

a. New, out of the box, the muzzleloader comes without the bolt in the receiver.
b. If the bolt is installed already in the rifle, follow these instructions:

**Note:** The Evolution and ThunderBolt rifles are equipped with the Ultra Glide Bolt, which cocks the internal striker when the bolt handle is lifted. There will be slight resistance when lifting the uncocked bolt from the closed position, as this lifting motion cocks the striker.

1. Move the safety to the forward "Fire" (F) position.
2. Lift up on the bolt handle to release out of stock groove.
3. Pull the trigger and hold.
4. Lift the bolt handle up and over the safety lever while still holding the trigger in.

### Disassembly of the Bolt

**Note:** During the course of a shooting session, if at any time the bolt should not function correctly, please remove from receiver and inspect. Traditions recommends that you disassemble the bolt as described below.

**Note:** Due to larger amounts of powder being used the powder residue may build up inside the bolt assembly when shooting. Spray some Easy Clean solvent into the face of the bolt so that it penetrates the inside area of the bolt body. This will loosen the powder residue that has built up inside the body and should allow the striker to function properly. If the bolt is still not functioning correctly, please follow these instructions.
Please refer to the diagram of the Bolt Action Muzzleloader and familiarize yourself with the bolt and its' parts before attempting to disassemble it.

1. Using a 2mm (metric) hex wrench, loosen and halfway unscrew the small set-screw located in the bolt head. It is located underneath and at the rear of the bolt.
2. Using the 209 Depriming tool or a wide blade flat-headed screwdriver, unscrew the striker counterclockwise, located at the front of the bolt and remove it from the bolt body.

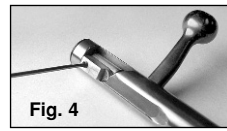


Fig. 4

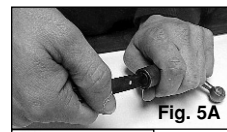


Fig. 5A

**Helpful Hint:** Secure the 209 Depriming tool in a pair of vice grips and use the vice grips for more leverage when unscrewing the striker from the bolt body.

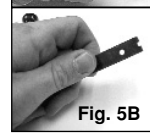


Fig. 5B

3. Separate the striker, spring and bolt head.
4. Clean bolt parts with hot, soapy water using a nylon brush to remove residue.
5. Lightly lubricate all parts using light gun oil.

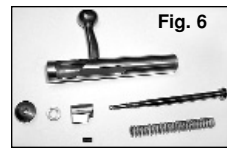


Fig. 6

**Note:** Do not use grease or heavy lubrication on these parts. In cold weather they become thicker and can affect the function of the bolt possibly resulting in a misfire or unintentional firing.

## Assembly of Bolt

1. Insert the striker through the middle of the spring.
2. Insert spring & striker into the bolt body with striker head facing opposite of body cutout.
3. Screw the striker into the bolt head. You should be able to see the threads sticking out of the bolt body. Note: The striker head should be approx. 1/16" below the face of the bolt body.

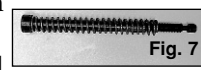


Fig. 7

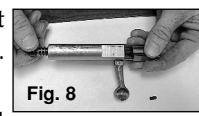


Fig. 8

**Note:** The correct distance will be determined when you complete assembly of the muzzleloader and test to make sure the primer or percussion cap is being fully struck by the striker. If the striker does not hit cap or primer, unscrew striker 1/4 turn out.

4. Reset (2mm) set screw in the bolt head.

## Installing the Bolt Into the Receiver

**Note:** Before installing the bolt into the receiver, you must first install the breech plug and the nipple. See Installation instructions for both items.

1. Inspect breech area for obstructions or debris. Clean out if necessary.
2. Move safety in "Fire" (F) position.
3. Pull trigger to rear and hold.
4. While holding in trigger, slide the bolt into the rear of the receiver.

**IMPORTANT:** Rotate & align the bolt head with the milled cutout slot in the base of the receiver. See fig. 9

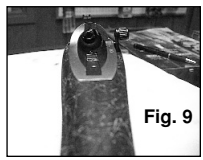


Fig. 9

**Helpful Hint:** Use your thumb to guide the bolt head into the groove in receiver.

5. Push the bolt handle up and over the thumb safety lever and into position.
6. Release trigger.

**Helpful hint:** The striker must be cocked to allow the bolt to be installed in the receiver. The bolt head must be in its rearmost position. If the striker has become uncocked during assembly or disassembly, insert the bolt into the receiver backwards, with the corners of the bolt head aligned with the receiver groove. Press upward on the bolt handle until the bolt turns clockwise. This will cock the striker. Remove the bolt and reverse it, reinstalling it in the receiver as normal.

7. **IMPORTANT:** To make sure the striker has been correctly installed:
   a. Make sure muzzleloader is unloaded!
   b. Place a cap or primer on nipple.
   c. Do not put any powder in muzzleloader! Close bolt.
   d. Point the muzzleloader in a safe direction.
   e. Fire muzzleloader to make sure cap or primer goes off.
   f. If the striker is not hitting the cap or primer, you need to unscrew the striker 1/4 turn counterclockwise to move striker head out.

## IGNITION

**Note:** Breech plugs and nipples will wear out over time and should be replaced periodically. We recommend that you purchase at least one extra nipple and breech plug for emergencies in the field or at the range. Thread size of standard Traditions nipples is M6x1
Thread size of Magnum Traditions nipple is M8x1

## Removal of the Nipple:

1. Make sure that the nipple is not capped or primed.
2. Remove the bolt assembly from the receiver.
3. Insert the breech plug wrench supplied with your muzzleloader through the rear of the receiver (while squeezing the trigger) and position the correct side of it over the nipple.
4. Insert the handle into the wrench and unscrew the nipple counter-clockwise.

**Note:** The breech plug and 209 adapter on the ThunderBolt rifle are one unit. Do not attempt to separate the ThunderBolt's 209 adapter from its breech plug, or breakage may result.

## Removal of the Breech Plug:

1. Insert the larger end of the wrench into the receiver (while squeezing the trigger) and position it onto the breech plug.
2. Insert the rod handle into the wrench.
3. Turn the wrench counter-clockwise and unscrew the breech plug and withdraw the wrench and plug from the receiver. It may require some extra force to free up the breech plug after shooting.

## Tips for stuck Breech Plugs:

Always make sure to lubricate the breech plug threads liberally before using your muzzleloader.

a. With the breech plug wrench fitted over the breech plug, actually try to tighten the plug and then rock it back and forth to loosen up the fouling.

Fig. 10

b. Remove the barrel from the stock and then remove the trigger assembly from the barrel. Soak the barrel in very hot, soapy water for about 1/2 hour. Secure the barrel in a padded vice. Position the wrench onto the breech plug and remove.

Fig. 11

c. If you still cannot remove plug, contact Traditions Customer Service Department.

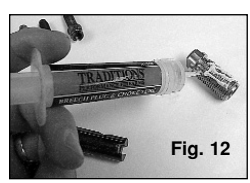


Fig. 12

## Installation of the Breech Plug:

1. Spray the breech plug inside and out with Traditions Easy Clean solvent to loosen the residue on the plug. Use a stiff brush to clean the outside threads and inner area of the breech plug. A pipe cleaner can be used to get the smaller areas clean and dry.

2. Wipe with a clean cotton cloth. Repeat until all residue is off.
3. Apply some Tradition's Breech Plug grease onto the threads of the breech plug.
4. Place the breech plug in the receiver.
5. Slide the wrench onto the threads and screw it in clockwise.
6. Securely tighten the breech plug into the breech area.

### Installation of the Nipple:

1. Before installing a nipple, be sure to clean and lubricate the threads with Traditions Breech Plug/Nipple Grease or Wonderlube 1000 Plus. When lubricating, take care to not get any grease in flash hole of nipple. Pipe cleaners or a nipple pick are excellent to clean out the flash hole in nipples.
2. Place the nipple on the end of the wrench and insert it through the receiver (while squeezing the trigger) to thread it into the breech plug.
3. Snug the nipple into the breech plug. Take care not to overtighten.

## ADJUSTABLE TRIGGER

Your rifle has an adjustable trigger that has been preset at the factory for optimum hunting performance. The adjustment screws have been fixed at the factory with a thread locking sealant.

**WARNING: No adjustments to the trigger or sear can be made except by the factory or a certified gunsmith only. Trigger pull should never be set to less than three pounds.**

## LOADING

For reasons of safety and proper performance, these loading instructions for your Traditions Muzzleloader must be followed closely. While some of the procedures may seem cumbersome, with practice they will soon become second nature and will make for safe, dependable and accurate shooting. (It is very helpful to have an experienced black powder shooter with you the first few times you load and shoot your muzzleloader.) If, after reading these instructions you still have questions concerning the safe use of your Muzzleloader, contact Traditions Customer Service Department.

**Follow these instructions in their sequence:**

## PROPELLANTS:

**If you have any questions regarding powder velocities and pressures please contact the manufacturer of the propellant.**

1. Black powder, Pyrodex, Pyrodex pellets or Triple 7 powder are the only safe propellants to use in this muzzleloading rifle. Maximum charges of Triple 7 should be reduced by 15%, whether measured by weight or volume.
2. The term "black powder" does not refer to any powder black in color, since modern smokeless powders are also black in color.
3. Be certain that the propellant you select is commercially manufactured black powder, Pyrodex or Triple 7 for use in muzzleloaders.

**DANGER: The use of SMOKELESS POWDER in any TRADITIONS muzzleloaders will result in excessively high pressures and can cause serious damage to the rifle and possible injury or death to the shooter and bystanders.**

4. Pyrodex is intended to be used on a volume-to-volume basis. It burns cleaner and produces less fouling build up than black powder.

## PROPELLANT RECOMMENDATIONS

- **Cannons or very large-caliber rifles:**
  1f/fg (coarsest granulation) black powder or Pyrodex CTG (not commonly found today). Not recommended for use in Traditions Bolt Action & In-Line Muzzleloading Rifles.
- **.45 to .58 caliber rifles:**
  2f/ffg (course granulation) black powder, Pyrodex RS, Select, Pellets or Triple 7 is recommended for use in Traditions Bolt Action & In-Line Muzzleloading Rifles.
- **Revolvers, pistols and .38 caliber (and under) rifles:**
  3f/fffg (standard granulation) black powder, Pyrodex P, .44/.45 Pellets or Triple 7. Not recommended for Traditions Bolt Action & In-Line Muzzleloading Rifles.
- **Flintlock primer:**
  4f/ffffg (finest granulation) black powder. ***Not recommended for Traditions Bolt Action & In-Line Muzzleloading Rifles.***
- Store all propellants according to the manufacturer's instructions listed on each container. Local fire regulations should also be followed.

**CAUTION: Never smoke while loading, shooting or handling propellants. Always follow the manufacturer's safety precautions as listed on the propellant container.**

## PREPARING TO LOAD THE PROPELLANT:

1. Wear eye and ear protection.
2. Check to make sure nipple is securely tightened into breech plug. If necessary, tighten with correct size nipple wrench.
3. Make certain the gun is unloaded.
   a. Move the safety into the "on" or "safe" position.
   b. Insert the ramrod into the barrel, when it is touching the top of the breech plug it should be approximately flush with the barrel.

**Note:** The ramrod could be slightly higher or lower. You should hear a metallic sound as the brass loading or cleaning jag makes contact with the breech plug.

   c. Remove the ramrod and lay it along the outside of the barrel, aligning the reference mark with the muzzle. If the gun is unloaded, the loading end of the ramrod should be within $1^{1/2}$" of the nipple.
   d. If the distance between the loading end of the ramrod and the nipple is greater than 1 1/2", the barrel may be either obstructed or loaded. To remove the obstruction, remove the nipple and the breech plug. Do not attempt to clear the barrel by firing. Before loading anything into the barrel, clean all oil and grease from inside the barrel. We suggest a thorough cleaning like mentioned in the beginning of this manual. We recommend using Traditions cleaning products to enhance your accuracy and ease of shooting & cleaning.

5. **Point the rifle down towards a safe area on the ground and load a percussion cap or primer into nipple.** Fire one or two caps or primers to blow out any oil or residue from the fire channel. Point the muzzle at a leaf or blade of grass to see if it moves. If it moves, you have a clear channel. If not, fire off a couple more caps.

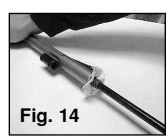


Fig. 14

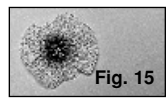


Fig. 15

6. Another way to see if you have a clear fire channel is to screw on a loading/cleaning jag on your ramrod and place a dry patch on the muzzle of your rifle. Push the patch down to the breech plug face and leave ramrod &

patch in bore. Point rifle in safe direction, place cap or primer on nipple & fire two caps or primers. Remove ramrod from bore and inspect patch. Patch should have a complete circular burn in middle. This tells you that you have a clear fire channel.

7. Stand the butt of the rifle on the ground so that the muzzle is pointed up and away from you and others. Never work with your face or any part of your body over the muzzle, even when the gun is unloaded.
8. Your rifle is now ready to be loaded.

## LOADING THE POWDER.

**Use only Black Powder or Pyrodex loose or pelletized powder or Triple 7.** Follow the Powder Manufacturer's Instructions when handling any type of powder.

Fig. 16

**When loading loose powder:**

a. Adjust your Traditions powder measure to the desired charge.
b. Pour powder from your Traditions flask into the measure until full. Pour powder down the barrel.

Fig. 17

**Warning:** Never load powder into a gun directly from a can, powder horn or flask. Always use a separate calibrated powder measuring device. A remaining spark or ember in the barrel may cause an ignition of the powder and cause harm to you, bystanders and the firearm.

Fig. 18

c. Tap the side of the barrel to settle the powder into the breech area.

Fig. 19

### When loading pelletized powder (Pellets):

a. Drop the desired amount of pellets into the barrel with the igniter side down. Using a pipe cleaner to handle the pellets makes it easier to load and keeps oil from your hands off the pellet.

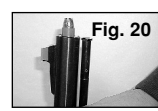


Fig. 20

Fig. 21

*IMPORTANT: Do not break or crush the pellets when loading or seating the projectile on top of the pellets. This could cause inconsistent groups.*

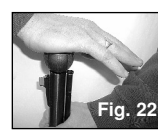


Fig. 22

## LOADING THE PROJECTILE:

**Note**: The Evolution rifle is equipped with the Projectile Alignment System (PAS), which helps ensure correct placement of the bullet in the muzzle. See Fig. 20.

**Saboted Bullets:** The plastic material used in our Traditions sabots is self-lubricating, therefore you need not pre-lube your bullets.

1. Insert the base of the bullet into the sabot, making certain the bullet is firmly & fully seated against the bottom of the sabot.
2. Place the assembled projectile into the muzzle.
3. Start the projectile with your thumb.
4. Using a ball starter, place the short shaft on top of the bullet and drive it downward until the starter hits the top of the muzzle.
5. Push the projectile deeper into the bore using the longer shaft of the ball starter until it hits the muzzle.
6. Use a loading jag on your ramrod and position it on top of the bullet inside the bore.
7. Holding the ramrod no further up than 6" over the bore apply firm pressure downward until the bullet is on top of the powder. ***(Holding the ramrod any higher will increase your chances of breaking your ramrod.)***

**Note:** If you are using pelletized powder do not crush them when loading the bullet. Testing has shown that crushed or broken pellets can cause bullet-grouping problems.

**IMPORTANT: ALWAYS SEAT THE BULLET FIRMLY ON TOP OF THE POWDER CHARGE. FAILURE TO DO THIS MAY RESULT IN INJURY OR DEATH TO YOU &/OR BYSTANDERS.**

**Note:** When using conical bullets or patched round balls, it is recommended to use loose powder only.

### CONICAL BULLETS:

1. Lubricate the projectile with Wonderlube 1000 Plus.
2. Place the projectile into the barrel, using the ball starter and ramrod follow the same procedures as shown with the saboted bullet loading.

**Note:** *Patches are not to be used with conical bullets, these bullets are made to full bore size.*

It is critical that the conical bullet is the correct size to your bore. It must fit fairly tight and require moderate pressure to seat on top of the powder. A loose fit could cause the projectile to separate from the

powder, particularly if the gun is subjected to jarring or sharp movement before ignition.

## PATCHED ROUND BALLS:

1. Lubricate a dry cloth shooting patch with Traditions Wonderlube 1000 Plus or use a pre-lubed shooting patch.
2. Center the patch over the muzzle.

**Caution:** *Never use any type of plastic patch or sabot with a round ball.*

3. Place the lead ball on top of the patch. If the lead ball has a flat section or ìsprueî, place it upward.
4. Using a ball starter, place the short shaft on top of the ball and drive the ball downward until the starter hits the top of the muzzle. If there is excess patch material after you seat the ball with the short shaft you can cut it away with a sharp knife. This will be unnecessary if you used a pre-cut patch.
5. Push the ball deeper into the barrel using the longer shaft of the ball starter.
6. Screw the loading jag on the ramrod and grasp the rod no more than 6" above the muzzle. (Holding the ramrod any higher will increase your chances of breaking your ramrod.)
7. Apply moderate pressure and push the ball firmly down on top of the powder.

## HOW TO CHECK IF THE BULLET IS FULLY SEATED ON TOP OF THE POWDER.

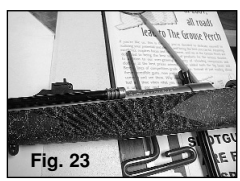


Fig. 23

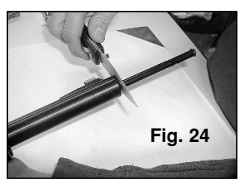


Fig. 24

1. Drop ramrod down the barrel until it taps the projectile.
2. Mark the ramrod where it sticks out of the end of the barrel.
3. Lay the ramrod along side of the outside of the barrel lining up the marked spot at the end of the barrel.
4. The jag should end at the top of your measured charge. (Note: if you change bullet weights or powder charges your jag will line up differently each time.) If the jag lines up anywhere but the top of your charge, you must pull the charge or extract the bolt and breech plug and then inspect and fix the problem.

**Note: Be sure to seat the patched ball directly on top of the powder charge, any gap between the powder and ball can result in excessive pressure upon firing and injury to the rifle, shooter and bystanders.**

## CAPPING YOUR MUZZLELOADER:

There are four major ignition types in black powder shooting at this time. They are the flint, the #11 percussion cap, the musket cap and the 209 shotgun primer. The flint is used in flintlock sidelock muzzleloaders only. The #11 percussion cap has been and is still used today with many sidelock and in-line muzzleloaders. The musket cap was mainly used in sidelock muzzleloaders and became popular with in-line muzzleloaders in the 1990's because of its' hotter ignition. The 209 shotgun primer is very popular because of its' features and benefits for superior ignition. The 209 shotgun primer is exactly as it is named, a shotgun primer, the same primer used in a shotgun shell. The 209 primer has three main benefits over the #11 cap and the musket cap. First, the 209 primer is water-resistant which keeps water and moisture out of the powder for a sure-fire ignition when conditions are damp or rainy. Second, the 209 primer is larger than the caps and can be handled easier with gloves on when in hunting situations. Thirdly, they are 10 times hotter than a #11 percussion cap which gives a more reliable ignition.

### When Capping your Muzzleloader please follow these instructions:

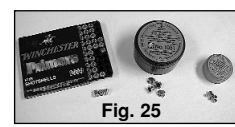


Fig. 25

Fig. 26

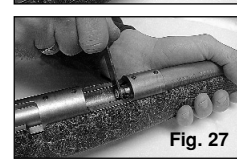


Fig. 27

1. Make sure that your muzzleloader is in the "safe" & "on" position.
2. Point the muzzle in a safe direction.
3. Choose the correct percussion cap or primer for your ignition system. Keeping the muzzle pointed in a safe direction, open the bolt to expose the nipple. Using a capper or your fingers, press the cap/primer over or into the nipple. When using the Evolution or ThunderBolt rifles, close the bolt and press the bolt handle firmly down into the receiver/stock notch. When using the Tracker or similar models, the bolt remains in the fully cocked position. When you are ready to shoot, push the thumb safety lever forward into the "Fire" position.
4. Your muzzleloader is now ready to fire.

## DECAPPING YOUR MUZZLELOADER:

1. Use a De-capping tool to remove a primer or a percussion cap from the nipple.
2. Slide the tool alongside the inner part of the cap or primer closest to the nipple and push the cap or primer off the nipple.
3. A depriming tool is provided with your rifle. This is a flat piece of case-hardened metal approximately 2 1/2" long and 1/2" wide, with a forked arrangement at one end. Use the forked end of this tool to remove spent 209 primers from your rifle. See Fig. 27.

## IF YOUR GUN FAILS TO FIRE:

Anyone involved with muzzleloading firearms will experience a hangfire or misfire. The following are a few simple procedures that will help you to effectively manage such occurrences.

### Hangfire

A hangfire is a delayed ignition. The percussion cap fires when the trigger is pulled and the main charge fires a brief moment later. There are many reasons that hangfires occur. If you are experiencing a substantial number of hangfires, there are a few possible causes that you need to evaluate. Verify the following:

1. Check that the load is packed tightly. Review loading procedures.
2. Verify that the percussion cap is the correct size and properly fitted onto the nipple.
3. Inspect that the ignition channel is clear of obstruction.
4. Check the condition of the percussion nipple. Verify that it has not mushroomed on the end and that it is securely screwed into the breech plug.
5. Verify that the proper propellant is being used and that it is the proper granulation and free from moisture, contamination and oils.
6. Check the condition of the percussion caps and propellant powder. For hunting situations, it is a wise practice to use fresh caps and powder. Use a fresh load for each day's hunting.
7. Make sure to prep your firearm by running a cleaning patch to clear the bore of oils, moisture and contamination. Fire two or three caps before loading to insure that the ignition channel is clear. See #7 in earlier section headed Preparation.

## Misfire

A misfire is a failure of either the cap or the main charge to ignite. This could be a very hazardous situation. Extreme caution should be exercised when dealing with a misfire.

Rarely is a misfire the fault of the rifle. Generally, it can be attributed to a problem with the propellant or cap.

Should your gun fail to fire for any reason, keep the muzzle pointed at your target for at least one minute with the bolt closed. By doing so, you make sure you are prepared for the chance of a delayed ignition.

**If the the percussion cap did not fire:**

1. Check to make certain that a cap was installed and is still securely positioned on the nipple.
2. Verify that the bolt striker cup face is free of debris.
3. Try a new cap.

**If the percussion cap fires but the main charge does not:**

1. Using a cleaning pick, verify that the hole in the nipple is clear of any obstruction.
2. Tap the butt pad of the rifle with your hand to direct powder into the ignition channel. Recap, verify your target, and fire again.
3. Verify that propellant was loaded under your ball or bullet by running the ramrod down the muzzle and observing the measure marks on your ramrod. Use extreme caution to always keep the muzzle pointed in a safe direction.
4. Check for any mechanical defects to the nipple, breech plug, bolt and striker assembly or trigger.

If, after several attempts, your gun has repeatedly failed to fire, you will need to unload the rifle. At this point a beginning shooter should seek assistance from an experienced shooter. Never leave an unfired charge in the barrel.

# REMOVING THE PROJECTILE AND THE CHARGE:

## Method 1

1. Open the bolt or plunger and carefully remove the percussion cap from the nipple.
2. Remove the bolt or plunger from the receiver.
3. Using the Breech Plug/Nipple Wrench, supplied with the rifle, remove the nipple and breech plug assembly from the rear of the barrel.

4. Insert a ramrod into the muzzle and push the load out of the rear of the barrel. Take care not to get water or powder into the trigger mechanism.
5. Clean and wipe all surfaces of loose material.
6. Remember, when the powder dries, it will again be volatile. Dispose of properly.

**NOTE:** It is also possible to drive the projectile out the muzzle. However, an extra long bench rod or a standard ramrod with an extension will be needed to accommodate the added length of the receiver.

### Method 2

1. Open the bolt or plunger and carefully remove the percussion cap from the nipple.
2. Using a range/bench ramrod, with a ball puller screw in one end, insert the screw end into the muzzle until the screw makes contact with the projectile.
3. Apply pressure to the end of the ramrod while at the same time turning it, allowing the ball puller screw to bite into the projectile.
4. Continue turning the ramrod until you can determine that the ball puller screw is well anchored into the projectile.
5. Firmly grasp the exposed end of the ramrod with projectile attached, pull it through the barrel and out the muzzle. One continuous non stop pull is generally best.

**NOTE: When extracting patched round balls it is helpful to pour warm soapy water down the barrel to aid in the removal of fouling from within the bore. This also lubricates the rifling to make the process easier.**

**NOTE:** When extracting saboted bullets the first few inches of the pull will separate the projectile from the plastic sabot. At that point the bullet will be free from the sabot and will come out easily. It will then be necessary to reinsert the ball puller screw back down the barrel and screw it into the plastic sabot and also pull it out.

6. Remove powder, if any.
7. Clean and dry the bore of the barrel making sure the breech area is dry before reloading fresh powder.
8. Dispose of the old powder safely.

## SIGHTING IN:

Start your sighting in at approximately 25 yards with a large target. You want to achieve a grouping of shots no matter where on the target

first. After you are able to shoot at least 3 shots in the same 2" area, then adjust your sight to the center bullseye.

**To adjust:** Move the rear sight in the direction you want the bullet to go.

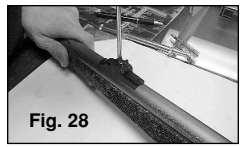


Fig. 28

**Note:** Traditions recommends while sighting in your muzzleloader that you clean the bore between each of your shots. By doing this you are starting out with a fresh, seasoned bore that will help prevent some shooting errors such as powder build up that could cause inaccuracies.

## SCOPE MOUNTING:

All Traditions In-Line muzzleloaders are drilled & tapped for mounting a scope. To sight in your scope, please follow the scope manufacturer's directions.

## RECOMMENDED LOADS:

Traditions recommends that your begin your shooting with a charge between 80-90 grains of Black powder, Triple 7, Pyrodex loose or Pelletized Powder to lessen the recoil & let yourself get acquainted with your muzzleloader. (ex. Pyrodex Pellets). The bullet that you need is dependent upon the game that you are hunting. Tradition's recommends using a powder charge of 80-150 grains depending on what you are hunting or shooting with your muzzleloader.

## CLEANING & MAINTENANCE:

A systematic routine of cleaning while shooting is strongly advised to aid in avoiding problems while loading and to optimize accuracy.

1. When cleaning the bore, use cleaning patches rather than shooting patches. Shooting patches are too small for cleaning and can dislodge in the bore.
2. If a patch becomes lost in the bore, use Traditions Patch Puller Worm attached to a ramrod for retrieval, or if necessary, remove the breech plug and push the patch out through the breech area. **Never load a charge over a lost patch.**
3. If unusual resistance is felt while loading a projectile, place a cleaning patch treated with Traditions Wonder Lube 1000 Plus on the cleaning jag affixed to the end of a ramrod and run it the full length of the barrel several times with your objective being to remove as much of the fouling build up as possible and at the same time lubricating the rifling.

**NOTE:** It should never be necessary to hammer or excessively force a projectile down the bore. Projectiles should load firmly against the powder charge with a series of short push strokes. If the projectile is the proper size, unusual resistance usually indicates the need to swab the bore with a treated cleaning patch. Use bore cleaner solution if heavily contaminated. An occasional cleaning of the bore with a brass Traditions Bore Brush is advisable to remove excessive fouling build-up.

**NOTE:** For barrels coated with Ultra-CoatTM with Teflon®, a nylon bristle bore brush should be used.

Fig. 30

4. When target shooting or sighting in, develop a habit of consistently wiping the bore with Traditions Wonder Lube 1000 after each shot. Depending upon the specific load, temperature, and humidity, a short series of shots with black powder or Pyrodex can be fired before it becomes necessary to wipe the bore with Traditions Easy Clean or Traditions Wonder Lube in order to remove fouling build-up. When shooting saboted bullets, make certain to run a lubricated cleaning patch through the bore between every shot. This will aid in removing fouling within the barrel and lubricate the bore to facilitate the loading of the non lubricated saboted bullets.

**If this procedure is not followed**, each successive loading will require additional force to drive the saboted bullet down the barrel while at the same time increasing the risk of not fully seating the projectile firmly atop the powder charge is greater. With an excessively fouled barrel, it is possible for a saboted projectile to get stuck part way down the bore.

If for any reason the projectile will not go all the way down to the powder charge, it will be necessary to extract the projectile from the barrel either with a bullet puller attachment on a ramrod or the breech plug can be removed, the charge removed and the projectile forced out the end of the barrel with a long bench/range rod or an extended ramrod.

**NOTE:** A dirty fouled barrel will directly effect your ability to group shots. However, in a hunting situation, only a few shots will likely be taken. If the barrel is prepped and lubed at the onset, it is not necessary to clean and lube the interior of the barrel between shots when hunting.

## CLEANING AFTER SHOOTING

**CAUTION:** Before cleaning, make absolutely certain the gun is unloaded and uncapped. Use the ramrod measuring method as described earlier.

Clean your gun as soon as possible after your shooting session. To leave a gun uncleaned, even overnight, can result in serious and damaging corrosion.

**ADVICE:** Take care when cleaning not to get water or solvent into the trigger assembly. If the trigger assembly is affected, it will be necessary to remove the barreled-action, dry the trigger assembly and treat it with gun oil.

**NOTE:** Regardless of the cleaning method, you must remove and thoroughly clean the percussion nipple, the breech plug and the threads and breech area of the receiver during each cleaning. Be certain to lightly lubricate the threads of the nipple and breech plug with Traditions Wonder Lube 1000 before reinstalling. When reinstalling these parts, take care not to overtighten them.

**ADVICE:** Nipples are a relatively inexpensive yet a very critical component of muzzleloading shooting. Periodically changing to a new nipple is highly advised.

## Cleaning Method

A thorough cleaning requires the complete disassembly of the firearm.

1. Make sure the firearm is unprimed.
2. Remove the bolt or plunger assembly from the reciever. Refer to disassembly section if unsure how to do.
3. Using Breech Plug/Nipple wrench, remove the nipple and breech plug from breech.
4. Remove stock from barrel. refer to Disassembly section if unsure how to do.
5. Remove Trigger assembly by unscrewing allen screws (2) from barrel with a 3mm allen wrench.
6. Pour 8-10 inches of hot, soapy water into a secured pail.
7. Immerse the receiver end of the barrel into the cleaning solution so that the water is above the breech opening.
8. Using a cleaning patch or brush affixed to a cleaning jag, pump the soapy water repetitvely through the barrel by raising and lowering the ramrod until bore is clean.
9. When the bore is clean, remove barrel from liquid. Run cleaning patches up and down bore to dry inside. Wipe outside of barrel with dry cloth. Dry receiver and breech area dry.

10. Lightly coat outside and inside of barrel and all other metal parts with Wonderlube 1000 plus
11. Clean all residue off inside and outside of the stock.
12. Disassemble the bolt if you have a bolt action muzzleloader. See Disassembly section.
13. Clean and then lightly oil all bolt parts or plunger parts and reassemble.
14. Reassemble the entire muzzleloader.

**NOTE:** An extra long bench/range ramrod is necessary for this cleaning method given that it must be as long as the barrel and receiver. Visit your Traditions retailer for this type of rod.

**NOTE:** Store your rifle in a cool, dry, secured area. Storage in a gun case is discouraged, as it may hasten condensation and corrosion. During long periods of storage, periodically check for signs of pitting or rusting on the surface and in the barrel bore.

**NOTE:** The myth that stainless steel & nickel doesn't have to be cleaned as much as blued steel is false. You need to clean and lubricate your stainless barrel just as you would a blued steel barrel. The stainless and nickel barrels are more rust resistant than blued steel, but over time can rust.

## SUPERIOR ACCURACY

Your new Traditions firearm has been engineered and manufactured to precise tolerances on modern computerized machinery. With proper care and cleaning, your new Traditions firearm will retain its superior appearance and accuracy for many years to come.

There are many environmental factors that influence accuracy such as humidity, temperature etc. Also, variations in measurements of the loads, the manufacture of the propellant charge and projectiles from lot to lot and between different manufacturers have an influence.

Shooting the same load, propellant and projectile, in the same volume and bullet weight is critical to achieve consistency.

Black powder and Pyrodex are hydroscopic and the amount of moisture content from one shooting session to another can contribute to variation in performance.

Accuracy can be affected by the simple take-down and reassembly of the rifle components. Although the sights or scope may not have moved, various forces such as tightness of the underside hex bolt, pressure from the way the stock touches the barrel (more common

with wood stocks that can be effected by moisture in the environment), the torque applied to the breech plug from installation to installation, etc. can all change the point of impact.
A clean barrel bore is definitely more accurate than one with accumulated fouling. Cleaning the bore of the barrel with one or two lubricated cleaning patches, attached to the cleaning jag end of a ramrod, between shots is the single most effective thing you can do to optimize accuracy between shots. This not only cleans away the bulk of the fouling, but at the same time lubricates the rifling for ease of loading and reduces the friction of the sabot as it exits the barrel.

## HELPFUL MUZZLELOADING ACCESSORIES

In order to participate fully in the sport, you will probably want to consider the purchase of the various Traditions accessories mentioned in this manual. Your firearms retailer should stock a complete line of accessories from Traditions. If not, ask him to order them for you. Visit him soon to discover all the ways to make your muzzleloading experience even more enjoyable and convenient.

Write to Traditions for a current catalog showing a complete line of firearms, ammunition, and accessories or view it on our web site *www.traditionsfirearms.com.* Your local retailer can special order any Traditions products you want.

# HUNTING LOAD RECOMMENDATIONS:

| Caliber | Bullet | Charge | Muzzle Velocity |
|---|---|---|---|
| .45 | 180 gr. saboted bullet | (2) 50 gr. pellets | 1950 fps |
| | | (3) 50 gr. pellets | 2400 fps |
| | | 100 gr. Pyrodex RS | 1900 fps |
| | | 150 gr. Pyrodex RS | 2350 fps |
| | | 100 gr. Triple 7 | 2100 fps |
| .45 | 200 gr. saboted bullet | (2) 50 gr. pellets | 1900 fps |
| | | (3) 50 gr. pellets | 2400 fps |
| | | 100 gr. Pyrodex RS | 1850 fps |
| | | 150 gr. Pyrodex RS | 2350 fps |
| | | 100 gr. Triple 7 | 2000 fps |
| .50 | 240/250 gr. saboted bullet | (2) 50 gr. pellets | 1700 fps |
| | | (3) 50 gr. pellets | 2100 fps |
| | | 100 gr. Pyrodex RS | 1700 fps |
| | | 150 gr. Pyrodex RS | 2100 fps |
| | | 100 gr. Triple 7 | 1900 fps |
| .50 | 300 gr. saboted bullet | (2) 50 gr. pellets | 1600 fps |
| | | (3) 50 gr. pellets | 1900 fps |
| | | 100 gr. Pyrodex RS | 1550 fps |
| | | 100 gr. Triple 7 | 1700 fps |
| .54 | 250 gr. saboted bullet | 100 gr. Pyrodex RS | 1700 fps |
| | 275 gr. saboted bullet | 100 gr. Pyrodex RS | 1600 fps |
| | 425 gr. conical bullet | 100 gr. Pyrodex RS | 1500 fps |

* Velocities are approximate, depending on barrel length and interior barrel dimensions of individual rifles.

## PREFERRED CUSTOMER WARRANTY REGISTRATION CARD

Referencing the label on the end of the carton, please write in the last 5 digits located on the right half of the UPC code into the boxes below.

UPC # 4 0 5 8 9 – _ _ _ _

Model #_____

Serial # (from barrel)_____

Name_____Age _____

Street_____

City _____ State _____ Zip _____

Day Time Phone #_____ Date of Purchase _____

Purchase Price _____ Store Name _____

1. **What is your age?** ❑[1] Under 18 ❑[2] 18-24 ❑[3] 25-34 ❑[4] 35-44 ❑[5] 45-54 ❑[6] 55-64 ❑[7] over 65

2. **Reason for your purchase** ❑[1] Hunting ❑[2] Target Shooting ❑[3] Personal use ❑[4] Gift ❑[5] Raffle Prize ❑[6] Other

3. **Do you own?** ❑[1] Other muzzleloaders ❑[2] Over/Under Shotgun ❑[3] Side by Side Shotgun ❑[4] Semi-Auto Shotgun ❑[5] Pump Shotgun ❑[6] Cartridge Rifle ❑[7] Handgun ❑[8] Bow

4. **Where purchased?** ❑[1] Gun Shop ❑[2] General Sporting Goods Store ❑[3] Hardware Store ❑[4] Chain Store ❑[5] Mail Order Catalog ❑[6] Internet Store

5. **Is this your first muzzleloader?** ❑[1] Yes ❑[2] No

6. **Which factors influenced your purchase?** ❑[1] Previously owned a Traditions product ❑[2] Magazine Ad/Article ❑[3] Internet/Website ❑[4] Traditions Catalog ❑[5] Recommendation of Salesperson ❑[6] Recommendation of a Friend ❑[7] Price ❑[8] Features ❑[9] Other

7. **What type of game do you hunt?** ❑[1] Whitetail Deer ❑[2] Mule Deer ❑[3] Elk ❑[4] Bear ❑[5] Antelope ❑[6] Turkey ❑[7] Small Game ❑[8] Other

8. **What do you think is the best way to get information about Hunting & Hunting products?** ❑[1] Magazine Ads ❑[2] Internet/Website ❑[3] Television Programs ❑[4] Radio

9a. **Which magazine do you read?**_____

b. **Which TV hunting show do you watch?**_____

❑ Check here to receive a free Traditions catalog showing muzzleloadings' largest selection of firearms and accessories or visit our website at www.traditionsfirearms.com

❑ To receive a Traditions Firearms Logo cap and catalog, send $11.95 along with your warranty registration card.

**NOTE: Return this card within 15 days of purchase in order to validate your limited lifetime warranty.**

Please complete all information above and mail to:

**TRADITIONS™**
**PERFORMANCE FIREARMS**

P.O. Box 776 • Old Saybrook, CT 06475-0776
**www.traditionsfirearms.com**

FIT-18-03/03-JB2

Cut Along Dotted Line